AMERICAN RADIUM INDUSTRIES
NYD987001476

THIS DOCUMENT IS CURRENTLY CLASSIFIED NON-CONFIDENTIAL BY EPA AS THE ABOVE SITE DOES NOT QUALIFY FOR FURTHER REMEDIAL ACTION AT THIS TIME

CONFIDENTIAL

NOT FOR PUBLIC RELEASE

RECOMMENDATION

Based on information contained in the site inspection report, and additional information collected, the following conclusions were drawn. Due to the lack of documented releases at the site and the nature of the premises (ie., no open ground), a release of contaminants to the groundwater or soil is not suspected. Furthermore, there are no wells on Manhattan which are utilized for portable water. A release of contaminants to the surface water is also not suspected due to the absence of a surface water pathway. Runoff from the site enters storm drains which lead to a wastewater treatment facility. There is no overland flow pathway to surface water from the site. Surficial contamination of interior building surfaces is possible, however. As there are approximately 200 residents of the building, this potential contamination may pose a health risk to the residents or workers now occupying the site. Due to the lack of a contaminant migration pathway, this contamination is not suspected to pose a threat to off-site persons, environments or resources, and therefore the site has no NPL potential. However, because there is no record of a termination survey being performed when the license was terminated in 1976, contamination may exist within the surficial or structural components of the building. Because of the potential threat to the current 200 residents of the building, the site should be **deferred to the Nuclear Regulatory Commission (NRC).**

APPENDIX A

OMB Approval Number: 2050-0095
Approved for Use Through: 1/92

PA Scoresheets

Note — This score is not really representative of the site as there is no complete migration pathway available. Any existing contamination is limited to the surface + subsurface structural components of a 10th floor of a building in Manhattan. Highest score is driven by dermal population + air pathway + on-site residents of building + soil exposure pathway.
Amy J. Brown

Site Name: American Radium Industries Investigator: EPA 12/16/92

CERCLIS ID No.: NYD987001476 Agency/Organization: _____

Street Address: 43 West 16th St Street Address: _____

City/State/Zip: NY, NY 10011 City/State/Zip: _____

Date: _____

SOURCE EVALUATION

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:
1	Other	The quantity of radioactive materials at this site is unknown. For this reason a volume of < 250 yd3 was assumed, and a WC score of 8 was assigned.

Source Description:
Radiation levels above the USEPA's maximum allowable exposure rates ~~may exist~~ within structural elements of the building

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:

Source Description:

Source No.:	Source Name:	Source Waste Quantity (WQ) Calculations:

Source Description:

Site WC:

PA TABLE 1: WASTE CHARACTERISTICS (WC) SCORES

PA Table 1a: WC Scores for Single Source Sites and Formulas for Multiple Source Sites

TIER	SOURCE TYPE	SINGLE SOURCE SITES (assigned WC scores)			MULTIPLE SOURCE SITES
		WC = 18	WC = 32	WC = 100	Formula for Assigning Source WC Values
CONSTITUENT	N/A	≤100 lb	>100 to 10,000 lb	>10,000 lb	*lb ÷ 1*
WASTESTREAM	N/A	≤500,000 lb	>500,000 to 50 million lb	>50 million lb	*lb ÷ 5,000*
VOLUME	Landfill	≤6.75 million ft³ ≤250,000 yd³	>6.75 million to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	*ft³ ÷ 67,500* *yd³ ÷ 2,500*
	Surface impoundment	≤6,750 ft³ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	*ft³ ÷ 67.5* *yd³ ÷ 2.5*
	Drums	≤1,000 drums	>1,000 to 100,000 drums	>100,000 drums	*drums ÷ 10*
	Tanks and non-drum containers	≤50,000 gallons	>50,000 to 5 million gallons	>5 million gallons	*gallons ÷ 500*
	Contaminated soil	≤6.75 million ft³ ≤250,000 yd³	>6.75 million to 675 million ft³ >250,000 to 25 million yd³	>675 million ft³ >25 million yd³	*ft³ ÷ 67,500* *yd³ ÷ 2,500*
	Pile	≤6,750 ft³ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	*ft³ ÷ 67.5* *yd³ ÷ 2.5*
	Other	* ~~≤6,750 ft³~~ ≤250 yd³	>6,750 to 675,000 ft³ >250 to 25,000 yd³	>675,000 ft³ >25,000 yd³	*ft³ ÷ 67.5* *yd³ ÷ 2.5*
AREA	Landfill	≤340,000 ft² ≤7.8 acres	>340,000 to 34 million ft² >7.8 to 780 acres	>34 million ft² >780 acres	*ft² ÷ 3,400* *acres ÷ 0.078*
	Surface impoundment	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	*ft² ÷ 13* *acres ÷ 0.00029*
	Contaminated soil	≤3.4 million ft² ≤78 acres	>3.4 million to 340 million ft² >78 to 7,800 acres	>340 million ft² >7,800 acres	*ft² ÷ 34,000* *acres ÷ 0.78*
	Pile*	≤1,300 ft² ≤0.029 acres	>1,300 to 130,000 ft² >0.029 to 2.9 acres	>130,000 ft² >2.9 acres	*ft² ÷ 13* *acres ÷ 0.00029*
	Land treatment	≤27,000 ft² ≤0.62 acres	>27,000 to 2.7 million ft² >0.62 to 62 acres	>2.7 million ft² >62 acres	*ft² ÷ 270* *acres ÷ 0.0062*

1 ton = 2,000 lb = 1 yd³ = 4 drums = 200 gallons

* Use area of land surface under pile, not surface area of pile.

PA Table 1b: WC Scores for Multiple Source Sites

WC Total	WC Score
>0 to 100	18
>100 to 10,000	32
>10,000	100

* The amount of contaminated building structures on-site is unknown, however it is assumed to be < 250 yd³

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GROUND WATER PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Ground Water Pathway Criteria List, page 7)?	Yes ___ No X
Is the site located in karst terrain?	Yes ___ No X
Depth to aquifer:	≥70 ft
Distance to the nearest drinking water well:	none within 4 miles ft

LIKELIHOOD OF RELEASE	A Suspected Release	B No Suspected Release	References
1. SUSPECTED RELEASE: If you suspect a release to ground water (see page 7), assign a score of 550. Use only column A for this pathway.	[illegible]		
2. NO SUSPECTED RELEASE: If you do not suspect a release to ground water, and the site is in karst terrain or the depth to aquifer is 70 feet or less, assign a score of 500; otherwise, assign a score of 340. Use only column B for this pathway.		340	
LR =		340	

TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people served by drinking water wells that you suspect have been exposed to a hazardous substance from the site (see Ground Water Pathway Criteria List, page 7). _____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water wells that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 2. Are any wells part of a blended system? Yes ___ No ___ If yes, attach a page to show apportionment calculations.		0	
5. NEAREST WELL: If you have identified a primary target population for ground water, assign a score of 50; otherwise, assign the Nearest Well score from PA Table 2. If no drinking water wells exist within 4 miles, assign a score of zero.		0	
6. WELLHEAD PROTECTION AREA (WHPA): If any source lies within or above a WHPA, or if you have identified any primary target well within a WHPA, assign a score of 20; assign 5 if neither condition holds but a WHPA is present within 4 miles; otherwise assign zero.		0	
7. RESOURCES		0	
T =		0	

WASTE CHARACTERISTICS			
8. A. If you have identified any primary target for ground water, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.			
B. If you have NOT identified any primary target for ground water, assign the waste characteristics score calculated on page 4.		18	
WC =		18	

GROUND WATER PATHWAY SCORE: $\frac{LR \times T \times WC}{82{,}500}$ (subject to a maximum of 100) = 0

PA TABLE 2: VALUES FOR SECONDARY GROUND WATER TARGET POPULATIONS

PA Table 2a: Non-Karst Aquifers

Distance from Site	Population	Nearest Well (choose highest)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	Population Value
0 to ¼ mile	0	20	1	2	5	16	52	163	521	1,633	5,214	16,325	0
> ¼ to ½ mile	0	18	1	1	3	10	32	101	323	1,012	3,233	10,121	0
> ½ to 1 mile	0	9	1	1	2	5	17	52	167	522	1,668	5,224	0
> 1 to 2 miles	0	5	1	1	1	3	9	29	94	294	939	2,938	0
> 2 to 3 miles	0	3	1	1	1	2	7	21	68	212	678	2,122	0
> 3 to 4 miles	0	2	1	1	1	1	4	13	42	131	417	1,306	0
Nearest Well =		0										Score =	0

PA Table 2b: Karst Aquifers

Distance from Site	Population	Nearest Well (use 20 for karst)	Population Served by Wells Within Distance Category: 1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	Greater than 100,000	Population Value
0 to ¼ mile		20	1	2	5	16	52	163	521	1,633	5,214	16,325	
> ¼ to ½ mile		20	1	1	3	10	32	101	323	1,012	3,233	10,121	
> ½ to 1 mile		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 1 to 2 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 2 to 3 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
> 3 to 4 miles		20	1	1	3	8	26	82	261	816	2,607	8,162	
Nearest Well =												Score =	

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SURFACE WATER PATHWAY
LIKELIHOOD OF RELEASE AND DRINKING WATER THREAT SCORESHEET

Pathway Characteristics

Do you suspect a release (see Surface Water Pathway Criteria List, page 111)? Yes ___ No X
Distance to surface water: 3000 ft
Flood frequency: >500 yrs
What is the downstream distance to the nearest drinking water intake? 5 miles
Nearest fishery? 0 miles Nearest sensitive environment? 5 miles

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to surface water (see page 111), assign a score of 550. Use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to surface water, use the table below to assign a score based on distance to surface water and flood frequency. Use only column B for this pathway.			
Distance to surface water ≤ 2,500 feet: 500			
Distance to surface water > 2,500 feet, and			
Site in annual or 10-year floodplain: 500			
Site in 100-year floodplain: 400			
Site in 500-year floodplain: 300			
Site outside 500-year floodplain: 100		100	
LR =		100	
DRINKING WATER THREAT TARGETS			
3. Record the water body type, flow (if applicable), and number of people served by each drinking water intake within the target distance limit. If there is no drinking water intake within the target distance limit, factors 4, 5, and 6 each receive zero scores.			
Intake Name / Water Body Type / Flow / People Served			
___ / ___ / ___ cfs / ___			
___ / ___ / ___ cfs / ___			
___ / ___ / ___ cfs / ___			
4. PRIMARY TARGET POPULATION: If you suspect any drinking water intake listed above has been exposed to a hazardous substance from the site (see Surface Water Pathway Criteria List, page 111), list the intake name(s) and calculate the factor score based on the total population served.			
___, ___ ___ people x 10 =			
5. SECONDARY TARGET POPULATION: Determine the number of people served by drinking water intakes that you do NOT suspect have been exposed to a hazardous substance from the site, and assign the total population score from PA Table 3.			
Are any intakes part of a blended system? Yes ___ No ___			
If yes, attach a page to show apportionment calculations.		0	
6. NEAREST INTAKE: If you have identified a primary target population for the drinking water threat (factor 4), assign a score of 50; otherwise, assign the Nearest Intake score from PA Table 3. If no drinking water intake exists within the target distance limit, assign a score of zero.		0	
7. RESOURCES		5	
T =		5	

PA TABLE 3: VALUES FOR SECONDARY SURFACE WATER TARGET POPULATIONS

Surface Water Body Flow (see PA Table 4)	Population	Nearest Intake (choose highest)	Population Served by Intakes Within Flow Category											Population Value
			1 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
<10 cfs	0	20	2	5	16	52	163	521	1,633	5,214	16,325	52,136	163,248	0
10 to 100 cfs	0	2	1	1	2	5	16	52	163	521	1,633	5,214	16,325	0
>100 to 1,000 cfs	0	1	0	0	1	1	2	5	16	52	163	521	1,633	0
>1,000 to 10,000 cfs	0	0	0	0	0	0	1	1	2	5	16	52	163	0
>10,000 cfs or Great Lakes	0	0	0	0	0	0	0	0	1	1	2	5	16	0
3-mile Mixing Zone	0	10	1	3	8	26	82	261	816	2,607	8,162	26,068	81,663	0
Nearest Intake =		0											Score =	0

PA TABLE 4: SURFACE WATER TYPE / FLOW CHARACTERISTICS WITH DILUTION WEIGHTS FOR SECONDARY SURFACE WATER SENSITIVE ENVIRONMENTS

Type of Surface Water Body			Dilution Weight
Water Body Type	OR	Flow	
minimal stream		< 10 cfs	1
small to moderate stream		10 to 100 cfs	0.1
moderate to large stream		> 100 to 1,000 cfs	N/A
large stream to river		> 1,000 to 10,000 cfs	N/A
large river		> 10,000 cfs	N/A
3-mile mixing zone of quiet flowing streams or rivers		10 cfs or greater	N/A
coastal tidal water (harbors, sounds, bays, etc.), ocean, or Great Lakes		N/A	N/A

SURFACE WATER PATHWAY (continued)
HUMAN FOOD CHAIN THREAT SCORESHEET

	A/ Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
Enter Surface Water Likelihood of Release score from page 12. LR =		100	

HUMAN FOOD CHAIN THREAT TARGETS

8. Record the water body type and flow (if applicable) for each fishery within the target distance limit. If there is no fishery within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Fishery Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

9. PRIMARY FISHERIES: If you suspect any fishery listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate Factor 10. List the primary fisheries:

10. SECONDARY FISHERIES

A. If you suspect a release to surface water and have identified a secondary fishery but no primary fishery, assign a score of 210.

B. If you do not suspect a release, assign a Secondary Fisheries score from the table below using the lowest flow at any fishery within the target distance limit.

Lowest Flow	Secondary Fisheries Score
< 10 cfs	210
10 to 100 cfs	30
>100 cfs, coastal tidal waters, oceans, or Great Lakes	12

		12	
T =		12	

SURFACE WATER PATHWAY (continued)
ENVIRONMENTAL THREAT SCORESHEET

		A	B	
		Suspected Release	No Suspected Release	Reference
LIKELIHOOD OF RELEASE				
Enter Surface Water Likelihood of Release score from page 12.	LR =		100	

ENVIRONMENTAL THREAT TARGETS

11.. Record the water body type and flow (if applicable) for each surface water sensitive environment within the target distance limit (see PA Tables 4 and 6). If there is no sensitive environment within the target distance limit, assign a Targets score of 0 at the bottom of the page.

Environment Name	Water Body Type	Flow
		cfs
		cfs
		cfs
		cfs
		cfs

12. PRIMARY SENSITIVE ENVIRONMENTS: If you suspect any sensitive environment listed above has been exposed to a hazardous substance from the site (see Surface Water Criteria List, page 11), assign a score of 300 and do not evaluate factor 13. List the primary sensitive environments:

13. SECONDARY SENSITIVE ENVIRONMENTS: If sensitive environments are present, but none is a primary sensitive environment, evaluate Secondary Sensitive Environments based on flow.

A. For secondary sensitive environments on surface water bodies with flows of 100 cfs or less, assign scores as follows, and do not evaluate part B of this factor:

Flow	Dilution Weight (PA Table 4)		Environment Type and Value (PA Tables 5 and 6)		Total
cfs		x		=	
cfs		x		=	
cfs		x		=	
cfs		x		=	
cfs		x		=	
				Sum =	0

B. If all secondary sensitive environments are located on surface water bodies with flows >100 cfs, assign a score of 10.

10

T =

SURFACE WATER PATHWAY (concluded)
WASTE CHARACTERISTICS, THREAT, AND PATHWAY SCORE SUMMARY

WASTE CHARACTERISTICS

	A *Suspected Release*	B *No Suspected Release*
14. A. If you have identified any primary target for surface water (pages 12, 14, or 15), assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.	[illegible]	
B. If you have NOT identified any primary target for surface water, assign the waste characteristics score calculated on page 4.		18
WC =		18

SURFACE WATER PATHWAY THREAT SCORES

Threat	*Likelihood of Release (LR) Score (from page 12)*	*Targets (T) Score (pages 12, 14, 15)*	*Pathway Waste Characteristics (WC) Score (determined above)*	*Threat Score LR x T x WC / 82,500*
Drinking Water	100	5	18	0.11
Human Food Chain	100	12	18	0.26
Environmental	100	10	18	0.22

SURFACE WATER PATHWAY SCORE
(Drinking Water Threat + Human Food Chain Threat + Environmental Threat) 0.59

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SOIL EXPOSURE PATHWAY SCORESHEET

Pathway Characteristics

Do any people live on or within 200 ft of areas of suspected contamination? Yes X No ___

Do any people attend school or daycare on or within 200 ft of areas of suspected contamination? Yes ___ No X

Is the facility active? Yes X No ___ If yes, estimate the number of workers: <10

	Suspected Contamination	References
LIKELIHOOD OF EXPOSURE		
1. SUSPECTED CONTAMINATION: Surficial contamination can generally be assumed, and a score of 550 assigned. Assign zero only if the absence of surficial contamination can be confidently demonstrated. LE =	550	
RESIDENT POPULATION THREAT TARGETS		
2. RESIDENT POPULATION: Determine the number of people occupying residences or attending school or daycare on or within 200 feet of areas of suspected contamination (see Soil Exposure Pathway Criteria List, page 18). 200 people x 10 =	2000	
3. RESIDENT INDIVIDUAL: If you have identified a resident population (factor 2), assign a score of 50; otherwise, assign a score of 0.	50	
4. WORKERS: Use the following table to assign a score based on the total number of workers at the facility and nearby facilities with suspected contamination:	5	
5. TERRESTRIAL SENSITIVE ENVIRONMENTS: Use PA Table 7 to assign a value for each terrestrial sensitive environment on an area of suspected contamination: Sum =	0	
6. RESOURCES	0	
T =	2055	
WASTE CHARACTERISTICS		
7. Assign the waste characteristics score calculated on page 4. WC =	18	
RESIDENT POPULATION THREAT SCORE: LE X T X WC / 82,500.	100	
NEARBY POPULATION THREAT SCORE:	4	
SOIL EXPOSURE PATHWAY SCORE: Resident Population Threat + Nearby Population Threat	100	

Number of Workers	Score
0	0
1 to 100	5
101 to 1,000	10
>1,000	15

Terrestrial Sensitive Environment Type	Value

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AIR PATHWAY SCORESHEET

Pathway Characteristics	
Do you suspect a release (see Air Pathway Criteria List, page 211)?	Yes ___ No ___
Distance to the nearest individual:	_____ ft

	A Suspected Release	B No Suspected Release	References
LIKELIHOOD OF RELEASE			
1. SUSPECTED RELEASE: If you suspect a release to air (see page 211), assign a score of 550. Use only column A for this pathway.			
2. NO SUSPECTED RELEASE: If you do not suspect a release to air, assign a score of 500. Use only column B for this pathway.		500	
LR =		500	
TARGETS			
3. PRIMARY TARGET POPULATION: Determine the number of people subject to exposure from a suspected release of hazardous substances to the air. _____ people x 10 =			
4. SECONDARY TARGET POPULATION: Determine the number of people not suspected to be exposed to a release to air, and assign the total population score using PA Table 8.		1243	
5. NEAREST INDIVIDUAL: If you have identified any Primary Target Population for the air pathway, assign a score of 50; otherwise, assign the Nearest Individual score from PA Table 8.		20	
6. PRIMARY SENSITIVE ENVIRONMENTS: Sum the sensitive environment values (PA Table 6) and wetland acreage values (PA Table 9) for environments subject to exposure from a suspected release to the air.			
Sensitive Environment Type / Value: _____ / _____; _____ / _____; _____ / _____			
Sum =		0	
7. SECONDARY SENSITIVE ENVIRONMENTS: Use PA Table 10 to determine the score for secondary sensitive environments.		0	
8. RESOURCES			
T =		1263	
WASTE CHARACTERISTICS			
9. A. If you have identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4, or a score of 32, whichever is GREATER; do not evaluate part B of this factor.			
B. If you have NOT identified any Primary Target for the air pathway, assign the waste characteristics score calculated on page 4.		18	
WC =		18	

AIR PATHWAY SCORE: $\frac{LR \times T \times WC}{82{,}500}$ = 100.00

PA TABLE 8: VALUES FOR SECONDARY AIR TARGET POPULATIONS

Distance from Site	Population	Nearest Individual (choose highest)	Population Within Distance Category											Population Value
			1 to 10	11 to 30	31 to 100	101 to 300	301 to 1,000	1,001 to 3,000	3,001 to 10,000	10,001 to 30,000	30,001 to 100,000	100,001 to 300,000	300,001 to 1,000,000	Greater than 1,000,000	
Onsite	200	(20)	1	2	5	(16)	52	163	521	1,633	5,214	16,325	52,136	163,246	16
>0 to ¼ mile	14963	20	1	1	1	4	13	41	130	(408)	1,303	4,081	13,034	40,811	408
>¼ to ½ mile	42918	2	0	0	1	1	3	9	28	88	(282)	882	2,815	8,815	282
>½ to 1 mile	166506	1	0	0	0	1	1	3	8	26	83	(261)	834	2,612	261
>1 to 2 miles	259380	0	0	0	0	0	1	1	3	8	27	(83)	266	833	83
>2 to 3 miles	403490	0	0	0	0	0	1	1	1	4	12	38	(120)	376	120
>3 to 4 miles	613026	0	0	0	0	0	0	1	1	2	7	23	(73)	229	73

Nearest Individual = 20

Score = 1243

PA TABLE 9: AIR PATHWAY VALUES FOR WETLAND AREA

Wetland Area	Assigned Value
Less than 1 acre	0
1 to 50 acres	25
Greater than 50 to 100 acres	75
Greater than 100 to 150 acres	125
Greater than 150 to 200 acres	175
Greater than 200 to 300 acres	250
Greater than 300 to 400 acres	350
Greater than 400 to 500 acres	450
Greater than 500 acres	500

PA TABLE 10: DISTANCE WEIGHTS AND CALCULATIONS FOR AIR PATHWAY SECONDARY SENSITIVE ENVIRONMENTS

Distance	Distance Weight	Sensitive Environment Type and Value (from PA Table 5 or 9)	Product
Onsite	0.10	x	
		x	
0-1/4 mi	0.025	x	
		x	
		x	
1/4-1/2mi	0.0054	x	
		x	
		x	
		x	

Total Environments Score =

SITE SCORE CALCULATION

	S	S^2
GROUND WATER PATHWAY SCORE (S_{gw}):	0.00	0.00
SURFACE WATER PATHWAY SCORE (S_{sw}):	0.59	0.35
SOIL EXPOSURE PATHWAY SCORE (S_s):	100.00	10000.00
AIR PATHWAY SCORE (S_a):	100.00	10000.00
SITE SCORE: $\sqrt{\frac{S_{gw}^2+S_{sw}^2+S_s^2+S_a^2}{4}}$		70.71

SUMMARY

	YES	NO
1. Is there a high possibility of a threat to any nearby drinking water well(s) by migration of a hazardous substance in ground water?	☐	☐
A. If yes, identify the well(s). _____		
B. If yes, how many people are served by the threatened well(s)? _____		
2. Is there a high possibility of a threat to any of the following by hazardous substance migration in surface water?		
A. Drinking water intake	☐	☐
B. Fishery	☐	☐
C. Sensitive environment (wetland, critical habitat, others)	☐	☐
D. If yes, identify the target(s). _____		
3. Is there a high possibility of an area of surficial contamination within 200 feet of any residence, school, or daycare facility?	☐	☐
If yes, identify the property(ies) and estimate the associated population(s). _____		
4. Are there public health concerns at this site that are not addressed by PA scoring considerations? If yes, explain: _____	☐	☐

SITE RECORD REGION II FY:	DATES----WAM:	TDM:	DUE:

NAME: American Radium Industries EPA ID: NYD987001476 STATE ID:
EVENT TYPE: PA EVENT DATE: 11/30/92 LEAD: mFI COUNTY: New York ST: NY
EVENT QUALIFIER: defer to NRC RECOMMENDED ACTION: defer to NRC
(PA,SI,ESI,HRS,RA,RI/FS,DEFER TO RCRA OR NRC,OTHER)
PATHWAY SCORES GW: 0 SW: 0.59 AIR: 100 SE/DC: 100 TOTAL: 70.71
COMMENTS: High HRS score not realistic - driven only by dense air pop. + ±200 on-site residents. No complete migration pathways exist.
PATHWAYS OF CONCERN: n/a
LIKELIHOOD OF SCORING:
i.Actual/Obs. release: n/a
ii.Targets (primary, secondary): n/a
iii.Hazardous Waste Characteristics: radium-226 and lead-210
Additional information requirements:
Adequacy of information: (H=able to score, M=maybe, L=unlikely)
Notification of: NRC recommended
(Removal, Remedial, State, Fed. Facility, RCRA, NRC, Other)
REVIEWER: Amy J. Boucher SIGNATURE COMP. DATE: 12/26/92
POST REVIEW EVENTS--RCRA CHECK: STATE CONCURS:

AKAs - Canadian Radium & Uranium Corp.; Conrad-Hanovia; International Rare Metal Refinery; Conrad Precision Industries.

Radium-226 and lead-210 handled on 10th floor of the 12-story building from 1960-76. No spills, etc., known. No record of a DOL survey of site after permit cancelled (at owner's request) in 1976. Therefore, unknown whether offices are contaminated or not. No threat imposed to off-site targets, despite high PA method HRS score; no NPL potential. However, due to potential threat to 200 current residents of building, the site should be deferred to the NRC.